

## Proposal Full View

### Applicant Information

Organization Name

Sonoma County Water Agency \*

Tax ID

946000539

Proposal Name

Sonoma Valley Enhanced  
Groundwater Recharge Study \*

Proposal Objective

The Water Agency is submitting this proposal to continue an in-depth study and characterization of groundwater in the Sonoma Valley in order to protect, preserve, and enhance this precious and valuable resource. The Enhanced Groundwater Recharge Study proposed herein will build upon data collected and studies performed under the 2008 LGA grant funding from DWR. In that first study, two groundwater monitoring wells were installed and a groundwater recharge mapping study was performed. Based on input and direction received from the Basin Advisory Panel and Technical Advisory Committee, the Water Agency proposes this project to construct two additional groundwater monitoring wells and collect geologic, hydrogeologic and groundwater quality data to support and further evaluate the feasibility of enhanced recharge techniques, including Aquifer Storage and Recovery (ASR, using wells) of wintertime Russian River water and recharge (infiltration) of local stormwater, in Sonoma Valley, California. \*

### Budget

Other Contribution

\$56,869.00

Local Contribution

\$0.00

Federal Contribution

\$0.00

Inkind Contribution

\$0.00

Amount Requested

\$249,785.00 \*

Total Project Cost

\$306,654.00 \*

### Geographic Information

Latitude \*

DD(+/-) 38 MM 16 SS 50

Longitude \*

DD(+/-) -122 MM 26 SS 27

Longitude/Latitude  
Clarification

Location

County

Sonoma \*

Ground Water Basin  
 Hydrologic Region  
 Watershed 20 2206 San Pablo

Napa-Sonoma Valley-Sonoma Valley  
 San Francisco Bay

## Legislative Information

Assembly District 6th Assembly District \*  
 Senate District 2nd Senate District \*  
 US Congressional District District 1 (CA) \*

## Project Information

Project Name

Sonoma Valley Enhanced Gr

Implementing Organization	Sonoma County Water Agency
Secondary Implementing Organization	N/A
Proposed Start Date	4/15/2013
Proposed End Date	4/15/2015
Project Scope	Collect groundwater quality data to support and further evaluate the feasibility of enhanced groundwater recharge techniques.
Project Description	<p>The Sonoma Valley Enhanced Groundwater Recharge Study(Study) is based on input and direction from the Basin Advisory Panel and Technical Advisory Committee of the Sonoma Valley Groundwater Management Program. It will construct groundwater monitoring wells and collect geologic, hydrogeologic and groundwater quality data to support and evaluate the feasibility of enhanced recharge techniques, including Aquifer Storage and Recovery (ASR, using wells) of wintertime Russian River water and recharge (infiltration) of local stormwater, in Sonoma Valley, California. The Study will: 1. Construct two multi-level groundwater monitoring wells: one in an area of groundwater level decline which will also be used for monitoring during an aquifer test, and the other in an area of saline water intrusion; 2. Perform an aquifer test using an inactive municipal supply well to initially assess ASR feasibility; 3. Geochemical modeling of water quality and aquifer matrix geochemistry to assist in designing an aquifer storage and recovery pilot study; 4. Construct four shallow groundwater monitoring wells to evaluate potential sites for stormwater recharge projects.</p>

	<p>The Study is part of an incremental progression of analysis and collaboration to implement the Sonoma Valley GWMP. The GWMP identifies groundwater recharge through both groundwater banking of winter Russian River supplies through ASR in addition to infiltration of local stormwater as a primary strategy to enhance the sustainability of the Sonoma Valley Groundwater Basin. The Study will provide data required to further assess the feasibility of groundwater recharge through both ASR of Russian River water and infiltration of captured stormwater. The Study will increase the monitoring of groundwater conditions (water level and quality) associated with areas of declining groundwater levels and potential saline water intrusion, as well as increase the number of dedicated monitoring wells available in the Sonoma Valley.</p>
Project Objective	<p>The objective of the proposed Sonoma Valley Enhanced Groundwater Recharge Study is to collect geologic, hydrogeologic and groundwater quality data to support and further evaluate the feasibility of enhanced recharge techniques and improve the monitoring of groundwater levels and groundwater quality in Sonoma Valley.</p>

### Project Benefits Information

Project Benefit Type	Benefit Type	Measurement	Description
Primary	Groundwater Management-Other	0	<p>The proposed project will construct 6 monitoring wells (including 2 multi-level nested wells) that will be utilized for monitoring groundwater levels and water quality in the Sonoma Valley and</p>

			contribute to GMP, CASGEM and Salt and Nutrient Management Planning monitoring efforts.
Primary	Other-Hydrogeological	0	The project will include hydrogeologic research through drilling, aquifer testing, water quality sampling and geochemical modeling to further develop a pilot-scale aquifer storage and recovery program in an area of Sonoma Valley exhibiting groundwater-level declines and potential saline intrusion issues.

Project Objective

**Budget**

Other Contribution	<input type="text" value="56869"/>
Local Contribution	<input type="text" value="0"/>
Federal Contribution	<input type="text" value="0"/>
Inkind Contribution	<input type="text" value="0"/>
Amount Requested	<input type="text" value="249785"/>

Total Project Cost

306654

**Geographic Information**

Latitude DD(+/-)

38

MM 16

SS 50

Longitude DD(+/-)

-122

MM 26

SS 27

Longitude/Latitude

Clarification

Location

County Sonoma Ground Water Basin Napa-Sonoma Valley-Sonoma Valley Hydrologic Region San Francisco Bay WaterShed 20 2206 San Pablo

**Legislative Information**

Assembly District	6th Assembly District
Senate District	2nd Senate District
US Congressional District	District 1 (CA)

**Section : Applicant Information and Question's Tab****APPLICANT INFORMATION AND QUESTION'S TAB****Q1. Applicant Information**

**Provide the agency name, address, city, state, and zip code of the applicant submitting the application.**

Sonoma County Water Agency 404 Aviation Boulevard Santa Rosa, CA 95403

**Q2. Proposal Description:**

**Provide a brief abstract of the Proposal. This abstract must provide an overview of the proposal including the main issues and priorities addressed in the proposal. Within the abstract, please describe how the proposal relates to the GWMP's BMO's.**

The Water Agency proposes the Sonoma Valley Enhanced Groundwater Recharge Study (Study), based on input and direction received from the Basin Advisory Panel and Technical Advisory Committee of the Sonoma Valley Groundwater Management Program, to construct groundwater monitoring wells and collect geologic, hydrogeologic and groundwater quality data to support and further evaluate the feasibility of enhanced recharge techniques, including Aquifer Storage and Recovery (ASR, using wells) of wintertime Russian River water and recharge (infiltration) of local stormwater, in Sonoma Valley, California. The Study includes the following elements: 1. Construction of two multi-level (or nested) groundwater monitoring wells: one well in a localized area of groundwater level decline which will also be used for monitoring during the aquifer test (see number 2 below), and the other well in an area of saline water intrusion; 2. Performance of an aquifer test using an existing inactive municipal supply well to initially assess ASR feasibility; 3. Geochemical modeling of water quality and aquifer matrix geochemistry to assist in designing an aquifer storage and recovery pilot study; 4. Construction of four shallow groundwater monitoring wells to evaluate potential sites for stormwater recharge projects. The Study is part of a logical and incremental

progression of study, analysis, and collaboration in the Sonoma Valley in an effort to implement the Sonoma Valley GWMP, which was prepared in 2007 by a broad coalition of local stakeholders. The GWMP identifies groundwater recharge through both groundwater banking of winter Russian River supplies through ASR and infiltration of local stormwater as primary strategies to enhance the sustainability of the Sonoma Valley Groundwater Basin. The Study will provide data required to further assess the feasibility of groundwater recharge through both ASR of Russian River water and infiltration of captured stormwater. The Study will increase the monitoring of groundwater conditions (water level and quality) associated with areas of declining groundwater levels and potential saline water intrusion. Currently there are a limited number of dedicated wells in Sonoma Valley available for monitoring. Work associated with the proposed project would more than double the number of dedicated monitoring wells available for use. The goals of the Study support five of the ten Basin Management Objectives of the GWMP. 1. Further assess the feasibility of aquifer storage and recovery using wintertime Russian River water and local stormwater recharge as techniques for improving groundwater management in the Sonoma Valley (BMO-3 & BMO-4) 2. Further assess and monitor water quality in the southern Sonoma Valley in an area where potential saline water intrusion is a concern (BMO-5 & BMO-6) 3. Improve the groundwater-level and groundwater quality monitoring network in Sonoma Valley, which will help meet the objectives for the California Statewide Groundwater Elevation Monitoring (CASGEM) program and Salt and Nutrient Management Planning being undertaken in Sonoma Valley (BMO-4, BMO-5, BMO-6 BMO-8) 4. Improve the understanding of hydrostratigraphic conditions in southern Sonoma Valley (BMO-8) Below are the BMOs the Study will address: BMO-3 Identify and protect groundwater recharge areas and enhance the recharge of groundwater where appropriate BMO-4 Manage groundwater in conjunction with other water sources BMO-5 Protect groundwater quality for beneficial uses including minimizing saline intrusion BMO-6 Protect against adverse interactions between groundwater and surface water flows BMO-7 Improve the community's awareness of groundwater planning, water resources, and legal issues BMO-8 Improve the groundwater database and basin understanding through consistent monitoring and additional surveys, and improve basin analytical tools including the groundwater simulation model.

### **Q3. Project Director:**

**Provide the name and details (including email) of the person responsible for executing the grant agreement for the applicant. Persons that are subcontractors to be paid by the grant cannot be listed as the Project Director.**

Grant Davis, General Manager Sonoma County Water Agency 404 Aviation Boulevard Santa Rosa, CA 95403 grant.davis@scwa.ca.gov 707-547-1900

### **Q4. Project Manager:**

**Provide the name and contact information (including email) of the Project Manager from the applicant agency or organization that will be the day-to-day contact on this application.**

Marcus Trotta, Hydrologist IV Sonoma County Water Agency 404 Aviation Boulevard Santa Rosa, CA 95403 marcus.trotta@scwa.ca.gov 707-547-1978

### **Q5. Additional Information:**

[http://www.water.ca.gov/groundwater/groundwater\\_basics/gw\\_contacts\\_info.cfm](http://www.water.ca.gov/groundwater/groundwater_basics/gw_contacts_info.cfm)

- 1) ☐ Northern Region
- 2) ☒ North Central Region
- 3) ☐ South Central Region
- 4) ☐ Southern Region

#### **Q6. Additional Information:**

**Provide the Date of GWMP Adoption, if any, and list the pursuant Water Code Section or other legal Authority in which it was adopted.**

The Sonoma Valley Groundwater Management Plan (GWMP) was adopted on November 6, 2007 by the Sonoma County Water Agency Board of Directors. The GWMP was prepared under the authority of the Groundwater Management Act, California Water Code (Water Code) Sec. 10750 et seq, originally enacted as Assembly Bill (AB) 3030 in 1992 to encourage voluntary, non-regulatory groundwater management at the local level. The Sonoma Valley Groundwater Management Plan (GWMP) was developed in coordination with the Agency, the Valley of the Moon Water District (VOMWD) and the City of Sonoma (City) under a collaborative and cooperative process that included a broad range of 20 stakeholders participating on the Basin Advisory Panel (Panel). The Panel consists of representatives from local agriculture, dairies, government, private business enterprises, environmental groups, and domestic well users.

#### **Q7. Additional Information:**

**Provide a list of documents that support and indicate collaboration with other local public agencies with regard to the management of the affected groundwater basin (e.g., MOUs, MOAs, JPAs, adoption of a GWMP, recognition of county ordinances in permitting processes, or party to a groundwater basin adjudication order).**

1. Sonoma County Water Agency, County of Sonoma, Sonoma Valley County Sanitation District, City of Sonoma, Valley of the Moon Water District. Five-Party Cost-Sharing Agreement to Fund and Support the Sonoma Valley Groundwater Management Planning Process. Signed June 23, 2006. 2. Sonoma County Water Agency Resolution No. 07-0081. Resolution of the Board of Directors of the Sonoma County Water Agency of Intention to Prepare a Groundwater Management Plan for the Sonoma Valley Basin of Sonoma County. Approved Jan. 30, 2007 3. Valley of the Moon Water District Resolution No. 071101. Resolution of the Board of Directors of the Valley of the Moon Water District Approving the Sonoma Valley Groundwater Management Plan. Approved Nov. 6, 2007 4. Sonoma County Water Agency Resolution No. 07-0932. Resolution of the Board of Directors of the Sonoma County Water Agency Adopting A Groundwater Management Plan for the Sonoma Valley Basin of Sonoma County. Approved Nov. 6, 2007 5. City of Sonoma Resolution No. 40-2007. Resolution of the City Council of the City of Sonoma Adopting a Groundwater Management Plan for the city of Sonoma. Adopted Nov. 19, 2007 6. Sonoma County Water Agency, County of Sonoma Permit Resource Management Department, Sonoma Valley County Sanitation District, Sonoma County Agricultural Preservation and Open Space District, City of Sonoma, Valley of the Moon Water District. Six-Party Cooperative Agreement to Provide Funding and Support Information for the Sonoma Valley Groundwater Management Program. Signed Oct. 30, 2009 7. Sonoma Valley GWMP Technical Advisory Committee: Annual GWMP Progress Reports for Years 2008, 2009, 2010, 2011

#### **Q8. Additional Information**

**Name the entity(ies) providing the fund(s) reported in the above Budget section under the category "Other Contribution". If there are no "Other Contributions" Please answer this question with, "No Other Contributions".**

The Sonoma County Water Agency will provide funds reported in the proposed budget under the category "Other Contributions."

**Q9. Eligibility:**

**List the urban water suppliers that will receive funding from the proposed grant. Please provide the agency name, a contact phone number and email address. Those listed must submit self certification of compliance with CWC §525 et seq. and AB1420, see Attachment 10. If there are none, so indicate.**

Sonoma County Water Agency Contact: Marcus Trotta Phone: 707-547-1978 Email: Marcus.Trotta@scwa.ca.gov

**Q10. Eligibility:**

**Have all of the urban water suppliers, listed in Q9 above, submitted complete 2010 UWMP to DWR? If not, explain why. Have those plans been verified as complete by DWR? If not, explain current status.**

The above-listed urban water supplier, Sonoma County Water Agency, submitted a complete 2010 UWMP to DWR July 20, 2011. On September 28, 2011, the Water Agency received a letter from DWR stating that the 2010 plan addresses the requirements of the UWMP Act and SBX7-7.

**Q11. Completeness Check:**

**Have all of the fields in the application been completed?**

Yes

**Q.11. Completeness Check (cont)**

**If no, please explain. If yes, answer this question with "NA".**

NA

## **Section : Application Attachments Tab**

### **APPLICATION ATTACHMENTS TAB**

**Attachment 1. Authorizing Documentation**

**Upload authorizing documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments: Att1\_LGA12\_SCWA\_AuthDoc\_1of1.pdf

**Attachment 2. Eligible Applicant Documentation**



**Upload eligible documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments: Att2\_LGA12\_SCWA\_EligDoc\_1of1.pdf

### **Attachment 3. Status of GWMP**

**Upload the GWMP documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments: Att3\_LGA12\_SCWA\_GWMP\_1of1.pdf

### **Attachment 4. Project Description**

**Upload project description here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments: Att4\_LGA12\_SCWA\_ProjD\_1of1.pdf

### **Attachment 5. Work Plan**

**Upload work plan here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments: Att5\_LGA12\_SCWA\_WrkPln\_1of1.pdf

### **Attachment 6. Budget**

**Upload budget here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments: Att6\_LGA12\_SCWA\_BUDGET\_1of1.pdf

### **Attachment 7. Schedule**

**Upload schedule here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments: Att7\_LGA12\_SCWA\_SCHED\_1of1.pdf

### **Attachment 8. Quality Assurance**

**Upload quality assurance documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments: Att8\_LGA12\_SCWA\_QA\_1of1.pdf

### **Attachemnt 9. Past Performance**

**Upload past performance documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments:

Att9\_LGA12\_SCWA\_PERFORM\_1of2.pdf, Att9\_LGA12\_SCWA\_PERFORM\_2of2.pdf

### **Attachment 10. AB1420 and Water Meter Implementation Compliance**

**Upload 1420 and water meter implementation documentation here, if applicable. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".**

Last Uploaded Attachments: Att10\_LGA12\_SCWA\_1420\_1of1.pdf

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